THE POST

College:	**College of Engineering, Mathematics and Physical Sciences** http://emps.exeter.ac.uk/
Post:	**Graduate Research Assistant / Postdoctoral Research Associate / Research Fellow in Sustainable Drainage Systems (SWEEP)**
Reference No:	**R57786**
Grade:	**E - F**
HERA:	**23 - 32**
Reporting To:	**Professor Zoran Kapelan**

The above part-time (50% FTE) post is available from 1st November 2017 to 30th April 2020.

Job Description

The University of Exeter is leading an exciting new project in partnership with Plymouth University and Plymouth Marine Laboratory, the South West Partnership for Environment and Economic Prosperity (SWEEP) funded by the Natural Environment Research Council (NERC). SWEEP Impact Fellows will have a unique opportunity to develop research facing skills within a leading research intensive University, whilst also working directly with businesses, policy makers and community groups to deliver impact and real world change. SWEEP is seeking to recruit the research leaders of tomorrow, who are passionate about delivering impact from research.

As a SWEEP Impact Fellow at the University of Exeter, you will be expected to work closely with Pell-Frischmann and several other stakeholders to deliver impact project entitled "Assessment of potential for large scale implementation of sustainable drainage systems (SuDS) in the South West". Increasing population, urbanisation and climate change are putting additional pressure on existing sewer infrastructure by reducing their capacity to manage surface water runoff hence increasing the risk of flooding and pollution of the environment. These issues are of particular importance in the South West region which has most of UK's natural capital. The concept behind the SuDS is to mimic natural systems to drain away surface water run-off through collection, storage and cleaning before releasing it back into the environment. The overall aim of the project is to **develop an innovative, planning methodology and a tool for strategic level prioritisation of areas for SuDS implementation**.

Main purpose of the job:

The key project activities include:

1. Detailed assessment of the existing SWAT methodology and the tool developed by Pell-Frischmann, accompanied by related literature review;
2. Development of an improved surface water management methodology;
3. Development of an improved software tool based on the developed methodology, including a new, user friendly Graphical User Interface;
4. Collection of data (open and proprietary) and testing, validation and demonstration of the methodology and the tool on selected case studies;
5. Assessment of the potential for large scale implementation of SuDS in the South West with associated costs and benefits.

This project will allow you: to be part of a team of SWEEP Impact Fellows at the University of Exeter; to learn new things related to the Sustainable Drainage Systems; to conduct applied research to translate academic science into environmental, economic and social benefits to the South West of the UK; to work with local

businesses, authorities, policymakers and landowners with the decisions they need to make in relation to how they make investments, manage or utilise the natural environment.

Main duties and accountabilities:

1. To undertake applied research and develop impact within the field of Sustainable Drainage Systems. The responsibilities may include all or some of the following:

   - Plan, manage and deliver SWEEP Impact Project with the potential to work on multiple projects at the same time. There may also be the need to work on Impact Projects that cross disciplines or sectors;
   - Collaborate with non-academic partners within the South West Region, working with senior colleagues to do so;
   - Using new research techniques and methods;
   - Writing or contributing to publications or disseminating applied impact focussed research findings using media appropriate to the discipline;
   - Making presentations at conferences or exhibiting work in other appropriate events;
   - Analysing and interpreting the results of own research and generating original research ideas based on outcomes.

2. Potential to contribute to teaching and to be involved in the assessment of student knowledge including assisting in the supervision of student projects and in the development of student research skills, if required and in agreement with the SWEEP academic supervisor and SWEEP PI.

3. To work in collaboration with SWEEP colleagues as appropriate to the field of study including:

   - Contributing to collaborative decision making within the research group and SWEEP team;
   - Contributing to the production of collaborative research reports and publications.
   - Preparing papers and presenting information on SWEEP Impact Project progress and outcomes to bodies supervising research, e.g. steering groups.
   - Work closely with colleagues in Innovation, Impact and Business and other Professional Services at the University of Exeter, to support the delivery and evaluation of SWEEP impact projects;

4. To communicate complex information, orally, in writing and electronically.

5. To prepare proposals and applications to external bodies, e.g. for funding and contractual purposes

6. To contribute to the planning of SWEEP Impact Projects.

7. To use research resources, laboratories and workshops as appropriate and to take responsibility for conducting risk assessments, reducing hazards and for the health and safety of others.

8. To monitor and report of the use of Impact Project budgets as appropriate.

9. To engage in continuous professional development and to be responsible for continually updating knowledge and understanding in field of study or specialism and for developing skills.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

Person Specification – Graduate Research Assistant

Competency	Essential	Desirable
Attainments/Qualifications	Educated to first degree level in a related field of study or equivalent experience.	
Skills and Understanding	Possess sufficient breadth or depth of knowledge in the discipline and of research methods and techniques to work within own area.	
Prior Experience	Understanding of health and safety legislation.	
Behavioural Characteristics	Ability to maintain accurate records. Ability to organise and prioritise own research work within the project framework. Good written and verbal communication skills. Computer literate. Good analytical skills. Able to liaise with colleagues and students. Able to build contacts and participate in internal and external networks for the exchange of information and collaboration. Actively participate as a member of a research team. Engage in continuous professional development. Understand equal opportunity issues as they may impact on areas of research content.	
Circumstances	Willing to work flexibly to achieve project demands.	

Person Specification – Postdoctoral Research Associate

Competency	Essential	Desirable
Attainments/Qualifications	PhD (or nearing completion) or equivalent qualification/experience in a related field of study.	Previous research or equivalent experience / track record in the field of sustainable drainage systems.
Skills and Understanding	Sufficient knowledge in the discipline and of research methods and techniques to work within established research programmes.	Evidence of research activity and published research. Knowledge of Geographical Information Systems. Software programming skills.
Prior Experience	Understanding of health and safety legislation	Experience of undergraduate teaching.
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate material of a specialist or highly technical nature. Able to manage research and administrative activities and to balance the competing pressures of research and administrative demands and deadlines. Able to liaise with colleagues and students. Able to build contacts and participate in internal and external networks for the exchange of information and collaboration. Able to identify potential sources of funding. Actively participate as a member of a research team. Engage in continuous professional development. Understand equal opportunity issues as they may impact on areas of research content. Where appropriate to the role, willingness to undergo training in order to conduct risk assessments.	
Circumstances	Willing to work flexibly to achieve project demands.	Ability to travel to meet the demands of the role.

Person Specification – Postdoctoral Research Fellow

Competency	Essential	Desirable
Attainments/Qualifications	PhD or equivalent qualification/experience in a related field of study.	Be a nationally recognised authority in the subject area.
Skills and Understanding	Possess sufficient specialist knowledge in the discipline to develop/follow research programmes and methodologies. Record of research output in high quality publications.	
Prior Experience	Experience of managing research projects and research teams.	Experience of undergraduate / postgraduate teaching and supervision. Experience of acting as principal investigator on research projects.
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking. Able to participate in and develop external networks. Able to balance the pressures of research, administrative demands and competing deadlines.	Able to identify sources of funding, generate income, obtain consultancy projects, or build relationships for future activities.

Terms & Conditions
Our Terms and Conditions of Employment can be viewed here.

Further Information
Please see our website for further information on working at the University of Exeter.